

Abstract

Mobile units in a multicarrier, multidimensional communications system can assess  
5 their own channel coherence time attributes (base stations can also access such  
dynamics for mobile units as well). This information is utilized (either by the mobile  
unit itself or by an infrastructure component such as a base site) to determine a level  
of trustworthiness for other channel quality data as might be measured by the mobile  
unit. Different modulation and coding schemes, along with responsive frequency and  
10 time diversity resource allocations, are adaptively selected as a function of this level  
of trustworthiness.